



SB05-03Q

30V, 500mA Rectifier

Applications

- High frequency rectification (switching regulators, converters, choppers).

Features

- Low forward voltage ($V_F \text{ max}=0.55\text{V}$).
- Fast reverse recovery time ($t_{rr} \text{ max}=10\text{ns}$).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Ultrasmall-sized package, permitting SB05-03Q-applied sets to be compact and slim.

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

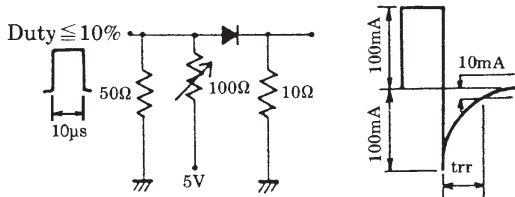
				unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
	V_{RSM}		35	V
Average Output Current	I_o		500	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	3	A
Junction Temperature	T_j		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Reverse Voltage	V_R	$I_R=150\mu\text{A}$	30			V
Forward Voltage	V_F	$I_F=500\text{mA}$			0.55	V
Reverse Current	I_R	$V_R=15\text{V}$			30	μA
Interterminal Capacitance	C	$V_R=10\text{V}, f=1\text{MHz}$		16		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$			600		$^\circ\text{C/W}$

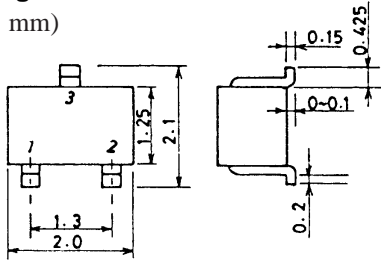
Marking : Q

t_{rr} Test Circuit



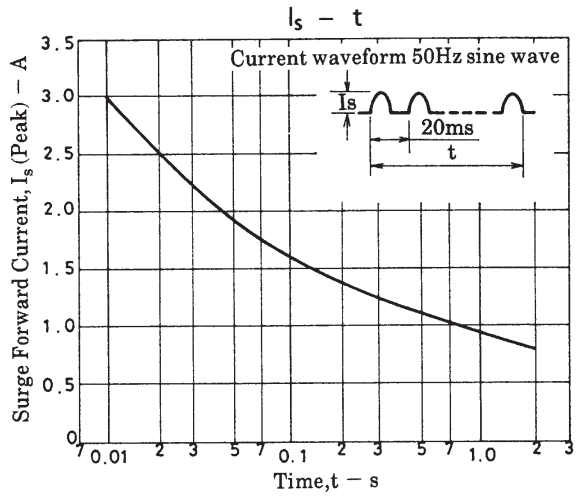
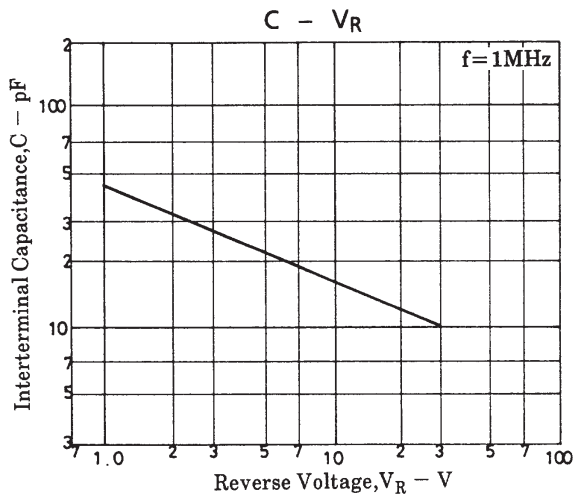
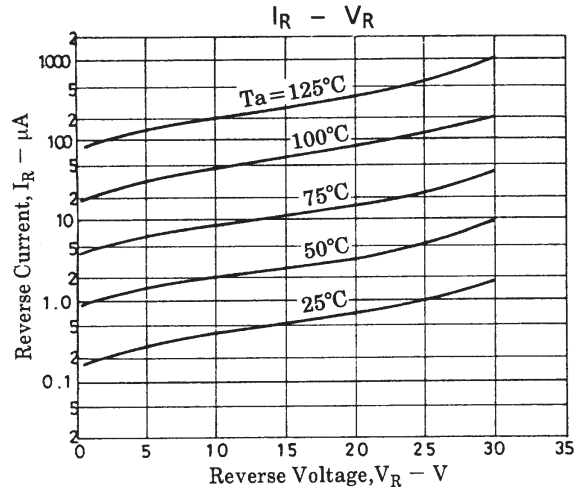
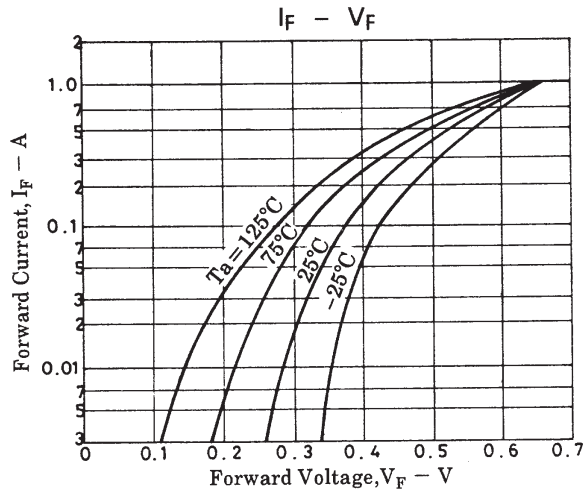
Package Dimensions 1197A

(unit : mm)



- 1 : Anode
- 2 : No Contact
- 3 : Cathode

SANYO : MCP



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